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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/661,715	09/12/2003	Michael Marcovici	2100.004400/Blumenthal I-	8267
46290 7590 05/14/2008 WILLIAMS, MORGAN & AMERSON 10333 RICHMOND, SUITE 1100 HOUSTON, TX 77042				
EXAMINER AJAYI, JOEL				
ART UNIT 2617		PAPER NUMBER		
MAIL DATE 05/14/2008		DELIVERY MODE PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/661,715

**Applicant(s)**

MARCOVICI ET AL.

**Examiner**

JOEL AJAYI

**Art Unit**

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 March 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☐ Information Disclosure Statement(s) (PTO/SI/02)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

In view of the Appeal Brief filed on March 10, 2007, PROSECUTION IS HEREBY REOPENED. The new ground(s) of rejection is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

### ***Response to Arguments***

Applicant's arguments with respect to claims 1-24 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

**Claims 1, 2, 4, 7, 8, 10, 11** are rejected under 35 U.S.C. 102(e) as being unpatentable over **Zhang et al. (U.S. Patent Application Number 2005/0154909)**.

Consider **claim 1**; Zhang discloses a method comprising:

Determining a private key for a first network (WLAN) based on at least one security value associated with a second network (cellular network) (paragraph 26); and establishing a plurality of sessions between a mobile terminal and the first network (WLAN service) using the private key (paragraphs 26-28).

Consider **claim 11**; Zhang discloses a method comprising: receiving at least one security value associated with a cellular network (paragraph 26); determining a private key for a wireless local area network based on the security value associated with the cellular network (paragraphs 26 and 27); and allowing establishment of a plurality of sessions between a mobile terminal and the wireless local area network using the private key (paragraphs 26-28).

Consider **claims 2, 4, 7, 8, 10**; Zhang discloses that the second network is a cellular network and the first network is a wireless local area network, and wherein determining the private key comprises determining the private key based on a shared secret data key associated with the cellular network (paragraphs 26-29).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

**Claims 3, 5, 6, 9, 12-19** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Zhang et al. (U.S. Patent Application Number 2005/0154909)** in view of **Bridgelall (U.S. Patent Application Number: 2002/0085516)**.

Consider **claims 3**; Zhang discloses the claimed invention except: determining the private key based on the shared secret data key comprises applying a root key, an electronic serial number associated with the mobile terminal, and a network-supplied random value to a Cellular Authentication and Voice Encryption (CAVE) algorithm to generate the private key.

In an analogous art, Bridgelall discloses determining the private key based on the shared secret data key comprises applying a root key, an electronic serial number associated with the mobile terminal, and a network-supplied random value to a Cellular Authentication and Voice Encryption (CAVE) algorithm to generate the private key (paragraph 41, lines 12-34).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teaching of Zhang by including a CAVE algorithm, as taught by Bridgelall, for the purpose of providing a communication system that enables roaming between a wireless local area network and a cellular network.

Consider **claims 5, 6, 9, 12, 13, 15, 17-19**; Bridgelall discloses that the second network is a cellular network (this includes CDMA and WWAN) having an associated authentication center and the first network is a wireless local area network, and wherein determining the private key comprises determining the private key based on one or more random challenges generated by the authentication center associated with the cellular network (paragraph 27; paragraph 41, lines 12-34; paragraph 46).

Consider **claims 14, 16**; Bridgelall discloses that receiving the shared secret data key comprises receiving the shared secret data key over a Signaling System 7 (SS7) protocol (paragraph 84, lines 1-9).

**Claims 20-24** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Zhang et al. (U.S. Patent Application Number 2005/0154909)** in view of **Waylett et al. (U.S. Patent Application Number: 2005/0088999)**.

Consider **claim 20**; Zhang discloses receiving at a wireless network at least one security value associated with a cellular network (paragraph 27, lines 1-4); determining, a private key based on the at least one security value (paragraphs 26 and 27); determining, at a mobile terminal, a private key based on at least one security value associated with the cellular network (paragraph 26-28); and allowing establishment of a plurality of sessions between the mobile terminal and the wireless local area network using the private key determined by the mobile terminal (paragraph 28).

Except: a server associated with a wireless local area network.

In an analogous art, Waylett discloses a server associated with a wireless local area network (paragraphs 39 and 85).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teaching of Zhang by including a server associated with the wireless local area network, as taught by Waylett, for the purpose of providing voice and data communication.

Consider **claim 21**; Waylett discloses receiving a shared secret data key associated with the cellular network and wherein determining, at the server, comprises determining the private key based on the shared secret data key (paragraphs 84 and 85).

Consider **claim 22**; Waylett discloses receiving the at least one security value comprises receiving one or more challenges generated by an authentication center associated with the cellular network and wherein determining, at the server, comprises determining the private key based on one or more signed responses associated with the respective one or more challenges (paragraphs 53, 84, 85).

Consider **claim 23**; Waylett discloses transmitting messages between the server and the mobile terminal using an Extensible Authentication Protocol (paragraph 84, lines 16-27).

Consider **claim 24**; Waylett discloses determining the at least one security value associated with at least one of a CDMA network, TDMA network, GSM network, OFDMA network, and AMPS network (paragraph 85).

***Conclusion***

Any response to this Office Action should be **faxed to** (571) 273-8300 **or mailed to**:

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**Hand-delivered responses** should be brought to

Customer Service Window  
Randolph Building  
401 Dulany Street  
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Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Joel Ajayi whose telephone number is (571) 270-1091. The Examiner can normally be reached on Monday-Friday from 7:30am to 5:00pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Lester Kincaid can be reached on (571) 272-7922. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications



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may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or 703-305-3028.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.

*Joel Ajayi*

/Lester Kincaid/  
Supervisory Patent Examiner, Art Unit 2617